

MIXING AND USE OF BLEACH AS A DISINFECTANT

	500 ppm (0.05%)	1,000 ppm (0.1%)	5,000 ppm (0.5%)
Exact Dilution Bleach* : Water	1:100	1:50	1:10
Household Measure Dilution	2 ½ tablespoons (1/6 cup) bleach in a gallon of water	1/3 cup (5 tablespoons T) bleach in a gallon of water	1 2/3 cup (25 T) bleach in a gallon of water
Usage	<input type="checkbox"/> Small blood spill <input type="checkbox"/> CPR training manikins <input type="checkbox"/> SARS environmental contamination	<input type="checkbox"/> Norovirus**	<input type="checkbox"/> Norovirus** <input type="checkbox"/> Large blood spill (after cleaning) <input type="checkbox"/> <i>Clostridium difficile</i>

* Based on use of 5.25% liquid bleach AND use within 24 hours

** Higher concentration for disinfection of environment contaminated with large amount of vomit / feces, *after cleaning*

Chlorine solutions in tap water at a pH >8 stored at room temperature in closed, opaque plastic containers can lose 40-50% of their free available chlorine level over 1 month. Therefore, in order to have a solution containing 500 ppm of available chlorine at 30 days, one must prepare a solution containing 1000ppm to start with.

Chlorine solutions should only be used on hard, non-porous surfaces

References

1. CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008 (<http://www.cdc.gov/ncidod/dhqp/sterile.html>)
2. Norovirus Outbreak in an Elementary School – District of Columbia – February 2007 (<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5651a2.htm>)

